

# SYSTEM AND METHOD FOR SYNCHRONIZING A BASE STATION IN A DISTRIBUTED RADIO SYSTEM

## ABSTRACT OF THE DISCLOSURE

There is disclosed a system and method for synchronizing a  
base station within a distributed radio system. A communication  
network is provided utilizing gigabit ethernet protocols and media.  
A global positioning system (GPS) is installed onboard one of a  
plurality of base stations. The single GPS, without the necessity  
for a holdover oscillator, is used to synchronize a plurality of  
the base stations within the network by transmitting a clock signal  
via the gigabit ethernet media to each base station. The gigabit  
Ethernet signal is tapped by a clock recovery circuit, present on  
each base station and the recovered signal serves as a master clock  
signal for the base station as well as a reference clock for the  
transmit and receive section.